



PVS-AT15k-30k-G1

Output Power:
15/20/25/29.9/30kW

Name:
Three-Phase Hybrid Inverter

Features

- Optimal performance**
 - 4 MPPTs, up to 40 A input per MPPT
 - Up to 200 % PV array oversizing
 - Up to 100 A charge / discharge current
 - ShadeSol shadow management
 - Dynamic export power control
- Safe and reliable**
 - String-level current monitoring
 - DC SPD Type II surge protection
 - P66 rated design for indoor and outdoor use
 - Optimal battery voltage range, 120-800 V
 - Intelligent operation modes and smart battery management
 - UPS-level switching time < 10 ms
- User-friendly**
 - Quick and easy-to-install with standard tools
 - Cover design, choice from a delightful range of colours
 - Smart setup, commissioning and monitoring via PVSTAR App
 - Anti-theft design

Certifications



Model	PVS-AT15k-G1	PVS-AT20k-G1	PVS-AT25k-G1	PVS-AT29.9k-G1	PVS-AT30k-G1
PV input					
Max. PV array power	30000Wp	40000Wp	50000Wp	59800Wp	60000Wp
Max. input voltage	1000 V				
MPP voltage range / rated input voltage	150 V to 950 V / 630 V				
Min. input voltage / start voltage	95 V / 180 V				
No. of independent MPPT trackers / strings per MPPT input	4/1		4/2		
Max. input current / Max. power per MPP tracker	20 A / 15000 W	20 A / 15000 W	40 A / 25000 W	40 A / 25000 W	40 A / 25000 W
Max. short-circuit current per MPP tracker	25A		50A		
Battery input					
Battery voltage range	120 V to 800 V				
Max. charge power from PV and AC side	30000 W	40000 W	50000 W	59800 W	60000 W
Max. charge power from AC side	15000 W	20000 W	25000 W	29900 W	30000 W
Max. discharge power	15000 W	20000 W	25000 W	29900 W	30000 W
Max. charge current / Max. discharge current	50A		100A		
No. of independent battery inputs	1		2		
Battery type	LiFePO4				
AC output					
Nominal AC voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V; 3/N/PE, 240 V / 415 V				
AC voltage range	270 V to 480 V				
Rated AC grid frequency	50 Hz / 60 Hz				
AC grid frequency range	45~55 Hz / 55~65 Hz				
Rated apparent power	15000 VA	20000 VA	25000 VA	29900 VA	30000 VA
Max. apparent power	15000 VA	20000 VA	25000 VA	29900 VA	30000 VA
Rated grid output current(@400V)	21.7 A	29.0 A	36.2 A	43.3 A	43.4 A
Max. grid output current	23.9 A	31.9 A	39.8 A	47.6 A	47.8 A
Power factor at rated power / adjustable range	1 / 0.8 leading to 0.8 lagging				
Harmonics THDi (@ Nominal power)	< 3 % (of nominal power)				
AC input					
Nominal AC voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V; 3/N/PE, 240 V / 415 V				
Rated grid frequency	50 Hz / 60 Hz				
Max. input power from grid	30000 W	40000 W	50000 W	50000 W	50000 W
Max. input current from grid	43.5 A	58.0 A	72.5 A	72.5 A	72.5 A
AC output(EPS)					
Nominal AC voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V; 3/N/PE, 240 V / 415 V				
Nominal output frequency	50 Hz / 60 Hz				
Rated apparent power	15000 VA	20000 VA	25000 VA	29900 VA	30000 VA
Max. apparent power (@400 V, continuous on-grid/off-grid)	16500 VA	22000 VA	27500 VA	32890 VA	33000 VA
Rated current(@400V)	21.7 A	29.0 A	36.2 A	43.3 A	43.4 A
Max. current (@400 V, continuous on-grid / off-grid)	23.9 A	31.9 A	39.8 A	47.6 A	47.8 A
Max. power on each phase (@400 V, continuous on-grid / off-grid)	5500 W	7333 W	9166 W	10963 W	11000 W
Peak output apparent power(off-grid up to 10s)	30000 VA	40000 VA	45000 VA	45000 VA	45000 VA
Max. switch time	< 10 ms				
Output THDv (@ Linear load)	2 %				
Efficiency					
MPPT efficiency	99.9 %				
European efficiency/Max. efficiency	97.2 % / 98.0 %		97.9 % / 98.4 %		
Protection					
Surge protection(Type II, according to EN/IEC 61643-11)	● / ○				
Insulation resistance detection	●				
PV input reverse polarity protection	●				
Battery input reverse polarity protection	●				
Ground fault monitoring	●				
Residual current detection	●				
AC short circuit protection	●				
Anti-islanding Protection	●				
General data					
Supported grid types	TN-S, TN-C, TN-C-S, TT				
Dimensions (W / H / D)	769 mm / 491 mm / 285 mm				
Weight	52.0 kg				58.0kg
Colour	● Morandi blue / ● Earl red / ● Scandinavian grey				
Operating temperature range	-30 °C ... +60 °C				
Cooling concept	Smart cooling				
Degree of protection (as per IEC 60529)	IP66				
Max. relative humidity	100 %				
Max. operating altitude	4000 m				
Features					
User interface	LED & APP				
BMS interface	CAN				
Communication interfaces	Dongle: WiFi (2.4 GHz) / LAN (100 Mbps) Inverter: RS485 (ModBus RTU, Sunspec RTU), LAN (100 Mbps, Modbus TCP only)				
Digital output (dry contact) / No. of outputs	● / 3				
Digital input (dry contact) / No. of inputs	● / 7				
Integrated power control / export power control	● / ●				
● Standard / ○ Matching/-Not Available					